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REMARKS

Applicants appreciate the thorough examination of the present application that is reflected in the Final Official Action. Applicants have studied the Examiner's newly introduced basis of rejecting the independent claims based on Matchett, and respectfully submit that the pending claims are patentable over England, Bjorn, and Matchett for the reasons that now will be described.

Objections to the Specification

The specification has been objected to on page 2, section 3, of the Final Office Action on the basis that disclosed web addresses are executable. In accordance with the Examiner's suggestion for overcoming this objection, the specification has been amended to place the references to web addresses within quotation marks. Accordingly, Applicants respectfully submit that the objections relating thereto have been overcome.

Applicants File Herewith a Terminal Disclaimer to Overcome the Provisional Obviousness-Type Double Patenting Rejection of Claims 1, 33, 56 and 69:

Claims 1, 33, 56 and 69 have been provisionally rejected under the nonstatutory judicially created doctrine of obviousness-type double patenting over copending U.S. Application Serial No. 09/764,827. Applicants submit herewith a Terminal Disclaimer disclaiming additional term over the copending U.S. Application Serial No. 09/764,827. Applicants' agreement to provide a Terminal Disclaimer is to expedite issuance of the present case and does not admit that the present invention is obvious in light of the copending U.S. Application Serial No. 09/764,827. Withdrawal of the obviousness-type double patenting rejection is respectfully requested.

Amended Independent Claims 1, 33 and 56 are Patentable over the Cited references

Claims 1, 3-4, 6-7, 10, 13-14, 16-17, 19, 33, 35-36, 38, 39, 42, 45-46, 48-49, 51, 56-59, 61-62, 65, 68-69, 71-72 and 74 stand rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 6,125,192 to Bjorn et al(hereinafter "Bjorn") in view of United States Patent No. 5,229,764 to Matchett et al. Applicants respectfully disagree as many of the

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recitations of these claims are neither disclosed nor suggested by the cited references. For

example, Amended Independent Claim 1 recites:

> A system for securely providing biometric input from a user, comprising:
> a security component which provides security functions, such that the security component can vouch for authenticity of one or more other components with which it the security component is securely operably connected;
> a biometric sensor component that is securely operably connected, as one of the one or more other components, to the security component;
> a card containing stored secrets and stored identifying information pertaining to an authorized holder of the card;
> a card reader for repeatedly accessing the stored secrets and stored identifying information, wherein the stored identifying information comprises stored biometric information of the authorized holder and wherein the card reader is configured to repeatedly access the stored secrets and stored identifying information upon beginning a security-sensitive operation and is configured to terminate repeatedly accessing upon completion of the security-sensitive operation;
> means for operably inserting the card into the card reader;
> means for establishing a secure, operable connection between the biometric sensor, the card reader, and the security component;
> means for comparing the repeatedly obtained biometric information to the stored biometric information of the authorized holder of the card; and
> **means for concluding, within the security component, that the security-sensitive operation is authentic based on all the one or more other components which are securely operably connected to the security component remaining securely operably connected to the security component until completion of the security-sensitive operation.**

Independent Claims 33 and 56 contain corresponding computer program product and method

recitations, respectively. Applicants respectfully submit that at least the highlighted portion of

Claim 1 is neither disclosed nor suggested by the cited reference for at least the reasons

discussed herein

Independent Claims 1, 33 and 56 stand formally rejected as unpatentable over Bjorn in

view of Matchett. Applicants explained in detail in their Amendment filed November 2, 2004

why the pending claims are respectfully submitted to be patentable over Bjorn. The Final Office

Action appears to concede that Bjorn does not teach all of the recitations of these claims by its

citation for the first time to Matchett. In particular, on Pages 2-2, Section 2.1, of the Final Office

Action, the Examiner states the following:

> Applicant has amended the independent claims by combining some of the dependent

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claims to recite for example the step of "concluding that the security-sensitive operation is authentic also requires that all other components which are securely operably connected to the security core and which are involved in the security-sensitive operation remain connected until completion of the security-sensitive operation." This added limitation can be found in one of the cited art (England, column 11, line 54 through column 12, line 8).

Initially, Applicants note that the Examiner has not made a formal rejection of the independent claims in view of England. However, even if the pending claims are rejected in view of England, the cited portion of England recites the following:

The operating system checks the signature of a component before loading it (block 303). If the signature is valid (block 305), the component has not been compromised by someone attempting to circumvent the boot process and the process proceeds to check the level of trust assigned to the component (block 307). If the signature is not valid (or if there is no signature) but the component must be loaded (block 319), the operating system will not assume the identity of a DRMOS upon completion of the boot process as explained further below.

A plug-and-play operating system provides an environment in which devices and their supporting software components can be added to the computer during normal operation rather than requiring all components be loaded during the boot process. If the device requires the loading of an untrusted component after the boot process completes, a plug-and-play DRMOS must then "renounce" its trusted identity and terminate any executing trusted applications (block 323) before loading the component. The determination that an untrusted component must be loaded can be based on a system configuration parameter or on instructions from the user of the computer.

((England, column 11, line 54 through column 12, line 8, emphasis added).

The cited portion of England is a description of FIG. 3 of that reference which is shown below:

FIG. 3 of ENGLAND

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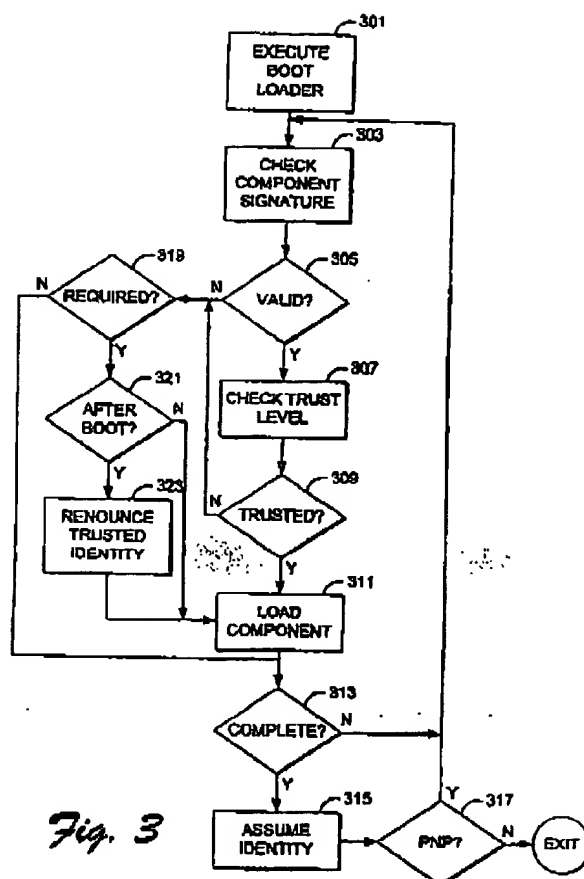Filed: January 17, 2001
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Fig. 3

With regard to FIG. 3, England describes that a component can be verified and loaded during or after a boot process. With regard to Block 303, England describes that an "operating system [that] checks the signature of a component before loading it" to determine whether it is trusted or untrusted. (England, column 11, lines 54-55). England also describes that "all components are signed by a trusted source and provided with a rights manager certificate", the rights manager certificate is the signature that is checked by the operating system. (England, column 11, lines 50-51). When the signature is determined to be valid (at Blocks 305-307), the component is loaded at Block 311 into the operating system irrespective of whether the component is being loaded during the boot process or after the boot process. It is only when the signature from a component is determined at Block 305 to be invalid does the operating system perform a further check at Block 321 as to whether the component is being tested after the boot process and, if so, then at Block 323 the operating system renounces its trust of the component

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and loads the component at Block 311.

Applicants submit that nowhere does England disclose that the operating system determine whether a component is trusted or untrusted based on whether the component has remained connected to the computer. Instead, the operating system of England tests only the signature (rights manager certificate) received from the component to determine whether it is to be trusted. Consequently, once the signature (rights manager certificate) from a component is loaded into the operating system, the component can subsequently be removed from the computer and later reconnected to the computer without any effect on the determination of trustworthiness of that component by the operating system (Blocks 303-309).

Accordingly, Applicants submit that the cited portion of England does not disclose or suggest at least the highlighted recitations of the independent claims for at least these reasons.

Furthermore, Matchett does not provide the missing teachings. The Final Office Action appears to concede that Bjorn does not disclose or suggest all of the recitations of the independent claims. (Final Office Action, page 6) However, the Final Office Action points to Matchett in an attempt to provide the missing teaching.

Furthermore, there is no motivation or suggestion to combine the cited references as suggested in the Final Office Action. As affirmed by the Court of Appeals for the Federal Circuit in *In re Sang-su Lee*, a factual question of motivation is material to patentability, **and cannot be resolved on subjective belief and unknown authority**. See *In re Sang-su Lee*, 277 F.3d 1338 (Fed. Cir. 2002). It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 U.S.P.Q. 303, 312-13 (Fed. Cir. 1983).

The Final Office Action states:

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Bjorn et al. to provide teachings means for repeatedly obtaining from the biometric sensor component biometric input of a user of the computing device and means for comparing the repeatedly obtained biometric input to the securely-stored biometric information of the owner , wherein each comparison comprises an authentication of the user as taught by Matchett et al. This modification would have been obvious because one skilled in the art would have been motivated by the suggestions provided by Matchett et al. so as to enhance security and prevent user

substitution to an unauthorized user, for example (see column 2, lines 55-66).

(See Final Office Action, page 7). This motivation is a motivation based on "subjective belief and unknown authority", the type of motivation that was rejected by the Federal Circuit in *In re Sang-su Lee*. In other words, the Final Office Action does not point to any specific portion of the cited references that would induce one of skill in the art to combine the cited references as suggested in the Final Office Action. If the motivation provided in the Final Office Action is adequate to sustain the Office's burden of motivation, then anything that would "enhance security and prevent user substitution to an unauthorized user" would render a combination obvious. This cannot be the case. Accordingly, the statement in the Final Office Action with respect to motivation does not adequately address the issue of motivation to combine as discussed in *In re Sang-su Lee*. Thus, it appears that the Final Office Action gains its alleged impetus or suggestion to combine the cited references by hindsight reasoning informed by Applicants' disclosure, which, as noted above, is an inappropriate basis for combining references.

However, for the sake of argument, even if Bjorn is combined with Matchett, they still would not disclose or suggest all of the recitations of the independent claims. Matchett states:

> Security protection could be enhanced by instructing the protected system to shut down should it be disconnected from the system 400 according to the present invention. Using such connection-dependent instructions, the protected computer's keyboard could be connected through a chassis of the system 400 according to the present invention. (Matchett, Col. 10, lines 2-10).

Accordingly, Matchett teaches that a protected device itself can shut down if it is disconnected from the security system. With reference to FIG. 1 of Matchett, a protected device (shown as "protected device control") can shut itself down if it is disconnected from the authentication system 100. However, Matchett does not suggest that the authentication system 100 makes any determination of authenticity of a security-sensitive operation based on the protected device becoming disconnected. Accordingly, if the protected device is reconnected to the authentication system 100, the data that is subsequently received would not be treated differently than if the protected device had not become disconnected.

Furthermore, Matchett does not teach or suggest a security core that can determine the authenticity of a security-sensitive operation based on components (other than a biometric sensor) remaining securely operably connected to the security core during the security-sensitive operation, as recited in the independent claims. Matchett lacks such teaching because it discloses, and is concerned with, protecting only a single protected device. With reference to FIG. 1 of the present application, the security core of the present may protect a plurality of various different types of devices 112-136.

Consequently, Applicants respectively submit that the Final Office Action has not established a *prima facie* case of obviousness. Accordingly, Applicants respectfully submit that none of the cited references either alone or in combination disclose or suggest all of the recitations of the independent claims for at least the reasons discussed herein. Furthermore, the dependent claims are patentable at least per the patentability of the independent claims from which they depend.

CONCLUSION

In light of the above amendments and remarks, Applicants respectfully submit that the above-entitled application is now in condition for allowance. Favorable reconsideration of this application, as amended, is respectfully requested.

Respectfully submitted,

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